## **Abstract**

The present invention relates to a process for controlling the fatty acid chain composition of triglycerides wherein a feed stream comprises a mixture of triglycerides containing at least one long chain. Said mixture is substantially free of trishort chain triglycerides and it is treated in at least two fractionation steps to fractionate between long chain triglycerides at temperatures above 200 °C and pressures between 0.01 and 10 Pa, wherein one of said steps fractionates between trilong chain triglycerides and mono- and dilong chain triglycerides and the other one of said steps fractionates between monolong chain triglycerides and dilong chain triglycerides. The process can be used for the providing of target triglycerides having a controlled fatty acid chain distribution.